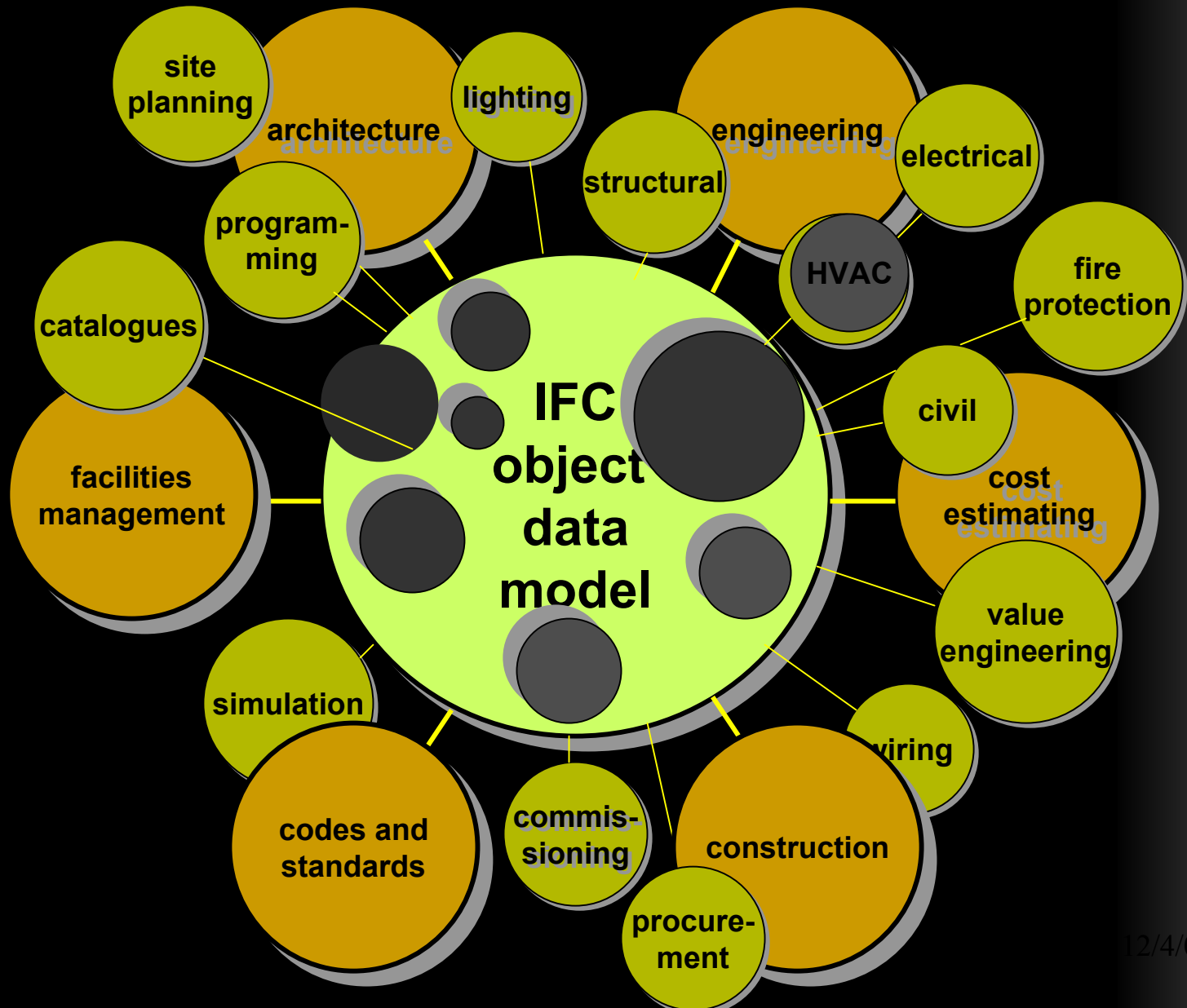


Status of the IFC Data Model



BS-8 Project



- **IAI Project: Building Services project number 8**
- **Completion of the IFC HVAC extension schemata**
 - HVAC equipment
 - HVAC systems
 - Controls
 - Connectivity
- **Participation**
 - Seven organizations in five countries
- **Support**
 - Governments (Australia, EU, Finland and U.S. - federal and state)
 - Private sector (Finnish and French)

BS-8 Project Goals



- **Extend IFC schemata to support the modeling and simulation of HVAC components and systems**
- **Support the use of various building simulation tools**
- **Import information from upstream applications in *.ifc or XML format**
 - Building geometry
 - General and performance specifications of materials
 - General and performance specifications of equipment and furnishings
- **Export information to downstream applications in *.ifc or XML format**
 - Other HVAC applications
 - Cost estimating applications
 - Commissioning and building operations/maintenance software
 - Code-checking applications
 - Software that serves utility companies
 - Many other types of applications

Processes Supported by BS-8



- **Fully supported process:** Building energy performance simulation
- **Implicitly supported processes:**
 1. Dynamic load estimation
 2. HVAC design
 3. HVAC equipment selection
 4. Measurement and verification (HVAC view)
 5. Building performance metrics (HVAC view)
 6. HVAC system and equipment commissioning
 7. HVAC system and equipment retrofit
 8. HVAC system and equipment physical layout
 9. HVAC system and equipment product data (catalogues, external data bases)

Processes Supported by BS-8



- **Partially supported processes:**

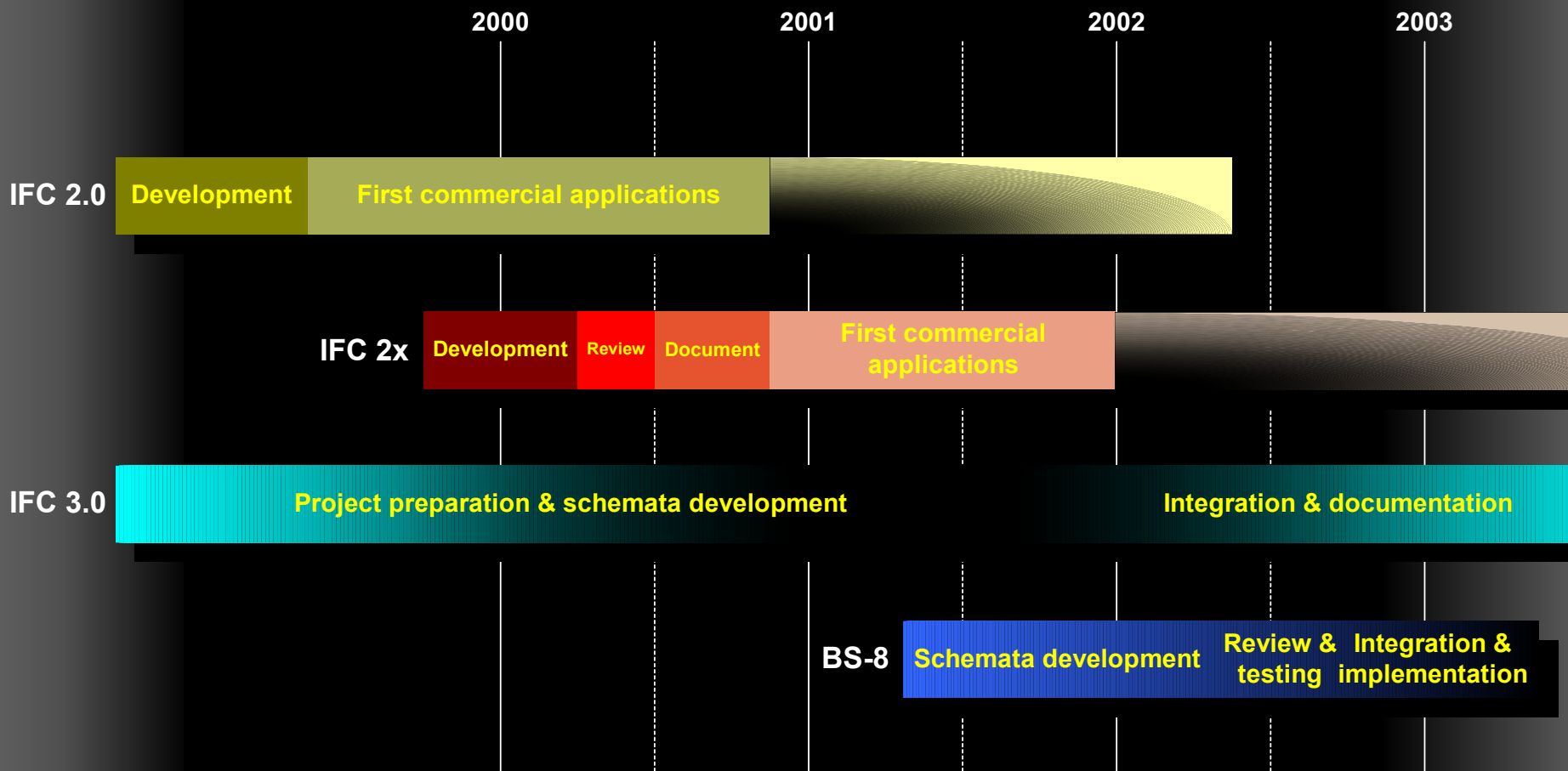
- **cost estimating**
- **procurement**
- **service**
- **energy code compliance**
- **maintenance**
- **operations**
- **fault detection and diagnostics**
- **emergency response**
- **construction and installation**
- **utility billing and cost allocation**
- **interference checking**
- **HVAC construction documents**
- **accessibility**

BS-8 Review Process



- **Structured and systematic review of work**
 - formal requests and summaries
 - regular schedule
 - regular review teleconferences
- **Incremental release of parts for review**
 - schemata released for review at early, mid- and final state of development
 - concurrent work and concurrent review
- **Reviewers (complete list yet to be developed)**
 - internal (SRG)
 - BS-8 international partners (BS-7 team, Olof Granlund, CSIRO, ...)
 - HVAC software developers (E+ team, Keops, TRANSYS, ...)
 - industry members (ASHRAE, selected consulting engineers, manufacturers, utilities, etc.)
 - The IAI Technical Advisory Group (TAG)
- **Continuously updated issues/resolutions log**
 - exposed on the public web site

BS-8 Project IAI Schedule



BS-8 Info Exchange



- **Project web site:**

<http://eetd.lbl.gov/btd/iai/bs8>

- file depository
- issues/resolution log
- up-to-date project information

- **Project contact:**

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